

IN THE SPECIFICATION

Please amend the specification as follows:

On page 6, please replace the first full paragraph beginning on line 6 and ending online 13 with the following:

The DNA sequence coding MF3 protein can be cloned into any cloning and/or expression vector for any organism, from bacteria to higher eukaryotes, including plants, with the help of commonly used genetic engineering methods, as described for, for example in J. Sambrook, E.F., Fritsch and T. Maniatis, Molecular Cloning: A Laboratory Manual 2nd ed. (Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press, 1989) We cloned the gene encoding MF3 and determined the gene sequence (SEQ ID NO: 2). We also determined the amino acid sequence of MF3 protein (SEQ ID NO: 1). *Escherichia coli* strain over-expressing MF3 was designed based on these results.

On page 33 replace the first paragraph, beginning on line 1 and ending on line 2 with the following:

29- GA PLVYLQGAGN IIPGLEKALE GKAVGDDLEV AVEPEDAYGE
YAAELVSTLS RSMFE -85 (SEQ ID NO: 3) ,

On page 33 replace the paragraph, beginning on line 4 and ending on line 5 with the following:

105-MQIVTI ADLDGDDVTVDGNHPLAGQR LNFVKIVDI RDASQEEIA-149
(SEQ ID NO:4).

On page 33-34 , please replace the paragraph beginning on page 33 line 29 and ending on page 34 on line 2 with the following:

Plasmid DNA from positive clone was isolated and used for sequencing of the insert. The DAN sequence coding N-end of antiviral protein appeared to be near BamH1 site. An open reading frame of 486 bp, starting with ATG and finished with TGA, was found. According to DNA coding region (SEQ ID NO: 2), the antiviral protein consists of 161 amino acid residues, as depicted in SEQ ID NO:1. The procedures involved in the above cloning processes can be basically found in the handbook J. Sambrook, E.F. Fritsch and T. Maniatis, Molecular Cloning: A Laboratory Manual 2nd ed. (Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press) (1989).

On page 34 please replace the paragraph beginning on line 6 and ending on line 23 with the following:

To modify the ends of MF3 we used the plasmid DNA B/H4 as a template and the following primers: Nde- mf3 5'- GGAATTCCATATGCTGATCGCCGCC-3' (SEQ ID NO:5), Hind- mf3 5'- CCCAAGCTTAGTGGTGATGGCCACC-3'(SEQ ID NO:6); the resulting fragment was digested with *Nde*I and *Hind*III and cloned into pGEMEX1 in place of gene 10. Reaction mixture (50 µl) consisted of approximately 10 ng of the template DNA, 1µM each of primers, 0.2 mM of dNTP mixture, 1xVent buffer (20 mM Tris-HCl, pH 8.8, 10 mM KCl, 2 mM MgSO₄, 10 mM (NH₄)₂SO₄, 0.1 % Triton X-100) and 1 U Vent DNA polymerase (New England Biolabs). The thermal cycling program started with 5 min denaturing at 96 °C, followed by 30 cycles of amplification: denaturing at 96 °C for 1 min, annealing at 45 °C for 1 min, and extension at 74 °C for 1 min; a final extension step was done for 10 min at 74 °C). PCR reaction samples (50 µl) were mixed with sample buffer and run on a 1% agarose gel containing 1 µg/ml ethidium bromide at 100 V for up to 1 h with Tris-borate EDTA as a running buffer. PCR product was eluted from 1% agarose gel with Prep-A-Gene DNA Purification Kit (Bio-Rad Laboratories) and recovered in 50 µl of 1xTE. Purified PCR product was digested with *Nde*I and *Hind*III and size fractionated on 1% agarose gel. DNA fragment about 500 bp was eluted with Prep-A-Gene DNA Purification Kit (Bio-Rad Laboratories) and recovered into 50 µl 1x TE.

On page 36, please replace the paragraph beginning on line 14 and ending on line 25 with the following:

T-DNA transfer to plant cells by *Agrobacterium*-mediated transformation was used for obtaining of transgenic plants. A plant binary vector, p13K, was constructed from pBin19 (Bevan, M. 1984) by cloning *Eco*RI fragments from pGL22/MF3 into *Eco*RI site of pBin19/ The pGL22/MF3 contained the promoter and terminator of the cauliflower mosaic virus 35S transcript between which modified MF3 was cloned into *Bam*HI site in place of the HPT gene (Pietrzak et al., 1986). Modification of the MF3 sequence was done by PCR on the B/H4 plasmid DNA with the following primers:

5' – GGCCACCATGCTGATCGCCGCCAATAAGG (SEQ ID NO:7)

5' - √GGTCAGTGGTGGTGGCCACCTTCG (SEQ ID NO:8)

Plasmid p13K was mobilised from *E. coli* to *Agrobacterium tumefaciens* LBA4404 by three-parental conjugation according Van Haute E. et. al, 1983.

IN THE SEQUENCE LISTING

Please, replace the sequence listing with the attached sequence listing. Sequence numbers 7 and 8 as disclosed on original application page 36 have been amended to the listing. The sequence listing is provided here on paper as well as on a computer readable diskette. The diskette content is identical to the paper listing.